

ACCESSION NR: AP4038143

namely, the amount of sugar decreased by 18—27.5 mg% and glycogen by 1.4—3.25 mg%. These changes, however, were only temporary, and on the day following the exposure the sugar level returned to normal and the amount of glycogen returned to normal a little later. Repeated exposure (20 times) to vibration resulted in a decrease of the sugar level to 83—90 mg%; after 30 times to 82—85 mg%; and after 40 times to 74—85 mg%. The glycogen content of the blood decreased correspondingly to 11.5—9.7 mg%. In animals exposed 70 times to total-body vibration with an amplitude of 50 μ and a frequency of 75 cps, no marked changes in the blood content of sugar and glycogen were detected. In rabbits exposed to vibration with an amplitude of 15 μ and a frequency of 75 cps, no marked changes were observed either at a single exposure or at repeated exposures. The following results were obtained in experiments with dogs exposed to total-body vibration with an amplitude of 750 μ and a frequency of 50 cps: After a single exposure for a period of 4 hours, a slight

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ACCESSION NR: AP4038143

decrease of the sugar content in the blood was observed (82 mg% compared to normal 89.5 mg%). After repeated exposure to vibration (55 times), the sugar level in the blood of the dogs decreased to 62 mg%, while the sugar level in the control group remained at the normal amount of 80 mg%; the glycogen level in the test animals, after repeated exposure to vibration, decreased considerably. Experimental data indicate that the action of total-body vibration with an amplitude of 200 μ and a frequency of 75 cps caused changes in the glykemic curves and a reduction in the sugar and glycogen blood contents in the test animals. Orig. art. has: 2 tables and 2 figures.

ASSOCIATION: Moskovskiy nauchno-issledovatel'skiy institut gigiyeny* im. F. F. Erismana (Moscow Scientific Research Institute of Hygiene)

SUBMITTED: 13Feb63

DATE ACQ: 05Jun64

ENCL: 00

SUB CODE: LS

NO REF SOV: 002

OTHER: 001

Card 3/3

VURONOVA, L.A.

CA

Syktor Aleksandr

Determination of uranium and thorium by means of a ray spectrometer. L. A. Vurionova, Zhurnal Fiz. Khim. 1975, (1945). - It was used as the comparison element in detns. of U and Th. Four mixts. consisting of various compns. of UO_2 , ThO_2 , and $SrCO_3$ with and without diluents were used to obtain the transition coeff., K , and the mixts. were weighed on a micro balance and carefully mixed in volatile liquids. Approx. 30 x-ray graphs of these mixts. were made and values proportional to the intensity of the lines were detd. The mean values of K for various mixts. of Th and U were, resp.: $K(Th/Sr) = 3.0 \pm 0.1$ and $K(U/Sr) = 2.0 \pm 0.1$. These coeffs. were used for a no. of analyses. A comparison of the results with those obtained by chem. analysis showed a good agreement for samples with large contents of U and Th (35-50%) as well as for samples with small contents of U and Th (0.1%).

W. R. Heim

Dr. Sci. Assoc.
Inst. Geol. Sci., AS USSR

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

FROM 171032JVN

107000 02

107000 02 000 001

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VORONOVA, L.A.

Penetration of potassium and sodium ions into the resting and excited
isolated muscle fibers. Trudy Len.ob-va est. 74 no. 1:74-77 '63.
(MIRA 17:9)

VORONOVA, L.A.

Penetration of potassium and sodium ions into a single muscle
fiber in certain physiological states. Fiziol.zhur. 45 no.11:
1353-1358 N '59. (MIRA 13:5)

1. From the department of biochemistry, Leningrad University,
Leningrad.

(MIR CLNS physiol.)
(POTASSIUM)
(SODIUM)

BERLIN, S.S.; DOROSHENKO, L.A.; VORONOVA, L.A.; NEVEROVSKA, V.O.
[Nevierovs'ka, V.O.]; ROYF, M.M.

Proposals of efficiency promoters. Leh. prcm. no. 2:63-65
Ap-Je '63. (MIRA 16:7)

(Technological innovations)

VORONOVA, L.A.

Determining the potassium and sodium content of isolated muscle
fibers by spectrum analysis. Vest. LGU 17 no. 21:86-93 '62.
(MIRA 15:12)

(POTASSIUM IN THE BODY) (SODIUM IN THE BODY)
(SPECTRUM ANALYSIS)

VORONOVA, L.D.; TORINA, I.G.; CHURKINA, N.M.

Effect of poisonous chemicals and mineral fertilizers on useful
animals. Okhr.prir.i zapov.delo v SSSR no.7:73-87 '62.
(MIRA 16:4)

(Agricultural chemicals--Toxicology)

SURNINA, L.V.; VORONOVA, L.G.

Significance of the study of volcanic gases for forecasting eruptions.
Geol. i geofiz. no.7:66-69 '64. (MIRA 1818)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR,
Novosibirsk, i Sakhalinskiy kompleksnyy nauchno-issledovatel'skiy
institut, poselok Novo-Aleksandrovsk.

ACC NR: AT6034740

SOURCE CODE: UR/0000/66/000/000/0062/0101

AUTHOR: Voronova, L. I.; Krementulo, Yu. V.

ORG: none

TITLE: A new method of determining the characteristics of complex dynamic systems

SOURCE: AN UkrSSR. Slozhnyye sistemy upravleniya (Complex control systems). Kiev, Naukova dumka, 1966, 82-101

TOPIC TAGS: dynamic system, linear differential equation ~~system~~

ABSTRACT: Among the numerous methods of determining the characteristics of systems from data on their normal operation there is a class of methods based on direct integration of differential equations. This article proposes a new method: the method of integrating a sliding band. The applicability of the method to complex systems which may be described by linear differential equations is examined. Before proceeding to its analysis the authors dwell on a brief description of existing methods in this class. It is concluded that the method of repeated integration of a sliding band makes it possible to determine the degree of the differential equation of the linear dynamic systems and the numerical value of its coefficients. The method is applicable to defining the characteristics of linear systems with variable parameters. Additive noise whose average value in the $(t-\tau, t)$ range in zero introduces no errors into the

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ACC NR: AT6034740

coefficients which are being determined. All that the states discussed may be applied to complex linear systems with several inputs and outputs. In the sliding (or moving) interval $(t-\tau, t)$ the current time is represented by t , while τ is a constant. All systems treated may be described by the following equation:

$$\sum_{i=0}^n a_i \frac{d^i y(t)}{dt^i} = \sum_{j=1}^m b_j \frac{d^j x(t)}{dt^j} + x(t), \quad n \geq m,$$

where $x(t)$ is the input signal and $y(t)$ is the output signal of the system. This is integrated n times within $(t-\tau, t)$ and the analysis is continued. Orig. art. has: 37 formulas and 8 figures.

SUB CODE: 09, 12/ SUBM DATE: 23Feb66/ OTH REF: 004

Card 2/2

KERBKSNER, I.P. (Kiyev); VORONOVA, L.I. (Kiyev)

Simulation of a corrector like an optimizing controller without
trial motions. Avtomatyka 10 no.1:58-64 '65.

(MIRA 18:6)

"APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R001860920020-3

APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R001860920020-3"

ASSOCIATION- 0010

REF CODE: 15

NO REF SOV: 005

OTHER: 000

Card 2/2

MARCHUK, Guriy Ivanovich; Prinimal uchastiye TURCHIN, V.F.; VORONOVA, L.I.,
red.; MAZEL', Ye.I., tekhn. red.

[Calculation methods for nuclear reactors] Metody rascheta iadernykh
reaktorov. Moskva, Gos. izd-vo lit-ry v oblasti atomnoi nauki i
tekhniki, 1961. 666 p. (MIRA 14:11)
(Nuclear reactors)

IVAKHNEKO, A.G. [Ivakhnenko, O.H.] (Kiyev); VORONOVA, L.I. (Kiyev)

Cognitive system "Alpha" as a predictive filter and optimizing
controller without hunting. Avtomatyka 9 no.3:23-40 '64
(MIRA 17:7)

VORONOVA, L.I. (Kiyev); KREMENTULO, Yu.V. (Kiyev)

Converters of discrete magnitudes to continuous ones using
alternating current. Avtomatyka 8 no.6:81-83 '63.
(MIRA 17:8)

ACCESSION NR: AP4040516

S/0102/64/000/003/0023/0040

AUTHOR: Ivakhnenko, O. G. (Ivakhnenko, A. G.) (Kiev); Voronova, L. I. (Kiev)

TITLE: Recognizing system Alpha as a learning filter and as an extremum controller without hunting

SOURCE: Avtomatyka, no. 3, 1964, 23-40

TOPIC TAGS: automatic control, on off automatic control, Alpha automatic control, pattern recognition

ABSTRACT: A further discussion of the possible characteristics of a self-learning automatic system suggested by the author (Avtomatika, no. 3, 1962) is presented. The following claims are laid: The binary on-off "Alpha" system is not only able (without human intervention) to recognize patterns but also to organize an extremum-control system. The only human guidance required is the selection of an extremum-performance-index sensor and the affirmation of the existence of a one-extremum characteristic. The complexity of the plant (number of control variables) does not limit the system. Learning (changing pole

Cord 1/2

ACCESSION NR: AP4040516

positions) takes place when a discrepancy between the outputs of the recognition system and the plant arises; control takes place when an agreement between the same outputs exists and lasts up to the "sufficiently well" point. Any recognition system classifying the states or images into output situations (or patterns) is capable of predicting the result and, therefore, of reasonable purposeful control. Invariance conditions of the system with respect to a specified disturbance which eliminate the relearning error are formulated. Problems requiring further consideration are indicated. The article is published "as a discussion material." Orig. art. has: 9 figures, 21 formulas, and 2 tables.

ASSOCIATION: none

SUBMITTED: 27Jan64

DATE ACQ: 26Jun64

ENCL: 00

SUB CODE: DP, IE

NO REF SOV: 007

OTHER: 001

Card 2/2

VORONOVA, L.I. (Kiyev); KREMENTULO, Yu.V. (Kiyev)

Schematic of a system for converting an angle of rotation into
impulses sensitive to the direction of the rotation. Avtomatyka
9 no.3:54-57 '64 (MIRA 17:7)

L 38726-66 EMT(d)/EWP(1) IJP(c)

ACC NR: AP6013099

SOURCE CODE: UR/0102/66/000/002/0003/0007

AUTHOR: Voronova, L. I. (Kiev); Krementulo, Yu. V. (Kiev)

ORG: None

TITLE: A new method for determining the dynamic characteristics of automatically controlled members

SOURCE: Avtomatyka, no. 2, 1966, 3-7

TOPIC TAGS: dynamic system, simulation test, analog computer, first order differential equation, second order differential equation, algebraic equation, *INTEGRATION*

ABSTRACT: The authors discuss three types of methods for determining the characteristics of dynamic systems: 1. the statistic method; 2. methods dealing with integration of differential equations by terms; 3. adjustable models. The second method is considered by the authors. It is assumed that a dynamic system is described by the linear differential equation

$$\sum_{i=0}^n a_i \frac{d^i y(t)}{dt^i} = x(t) + \sum_{j=1}^m b_j \frac{d^j x(t)}{dt^j}.$$

This expression may be used to determine any unknown coefficient when others are known. Certain difficulties are encountered which are related to the necessity of different-

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L 38726-66

ACC NR: AP6013099

iating the input $x(t)$ and the output $y(t)$ signals of the system. This difficulty can be eliminated by n -fold integration of the expression over the range $t-\tau, t$. It is obvious that this method is useful for determining a large number of coefficients a_1, b_j . For the case where it is necessary to determine k coefficients, integration of this expression $(n+k-1)$ times gives a system of algebraic equations with respect to the unknown coefficients. Three methods are given for expansion of this expression into a system of $(n+m+1)$ equations: 1. n -fold integration of the expression for $(n+m+1)$ equal intervals; 2. increasing the multiple of integration of the differential expression from n to $2n+m$ with invariant limits of integration; 3. n -fold integration of the differential equation for $(n+m+1)$ intervals of a given length. Systems of equations are given for each one of these three cases. The proposed method for determining the coefficients is used for members which are described by certain nonlinear ordinary and partial differential equations. The method is also applicable to multi-dimensional members. Experimental verification of this method was carried out on an MNB-1 type analog device for members described by the first and second order differential equation. The coefficients for those types of elements are given. Orig. art. has: 4 figures, 6 formulas.

SUB CODE: 121 SUBM DATE: 17Jun65/ ORIG REF: 000/ OTH REF: 004

Card 2/2

ACC NR: AP6024366

SOURCE CODE: UR/0280/66/010/002/0077/0085

AUTHOR: Ivakhnenko, A. G. ^(Kiev) Voronova, L. I. ^(Kiev)

ORG: none

TITLE: The recognition system as a predlotion filter

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 2, 1966, 77-85

TOPIC TAGS: recognition ^{process} ~~system~~, pattern recognition, mathematic prediction, therapeutics /
/ Alpha recognition system

ABSTRACT: It is shown that the Alpha positive-feedback perceptron-type -- or with a corresponding computer program -- recognition system (Ivakhnenko, A. G. Samoobuchayushchiyesya sistemy s polozhitel'nyimi obratnymi svyazyami. Izd-vo An UkrSSR, 1963) with classification of states according to output quantities may be employed as a adaptive prediction filter. This is exemplified by the utilization of this system to predict steady-state processes such as ocean wave amplitudes (Fig. 1) on using the following sequence of discrete values (the Kolmogorov formula)

$$O[(t)] = \sum_{n=1}^N /n r_n + \sum \sum /n_1 /n_2 r_{n_1 n_2} + \sum \sum \sum /n_1 /n_2 /n_3 r_{n_1 n_2 n_3} + \dots \quad (1)$$

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ACC NR. AP6024366

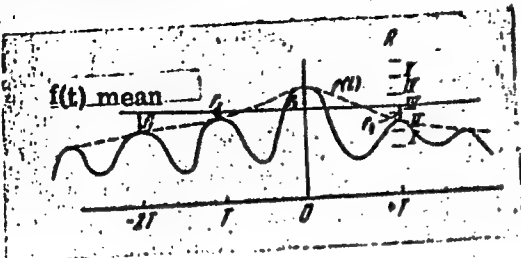


Fig. 1. Problem of predicting the amplitude of the following wave according to the amplitudes of the three preceding waves

(where f_n, f_{n+1} , etc. are discrete values of the function in the past; r_n, r_{n+1}, r_{n+2} , etc. are the weight coefficients of each term; $o[f(t)]$ is the predicted future value of the function; and N is the number of intervals of the prehistory) as the basis for selecting the features of the input images. In this case the input quantities (image features) for the Alpha system used as a prediction filter (Fig. 2) are the deviations f_1, f_2, f_3 and the problem is to predict the deviation f_4

(Fig. 1). It is shown that the percentage of correct predictions increases with both the increase in the number N of observed intervals and in the number n of discretizers and decreases with the increase in the number R of output (number of levels of discretization). In its simplified binary form (Fig. 3) this system displays the following advantages: 1) the need to operate only

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ACC NR: AP6024366

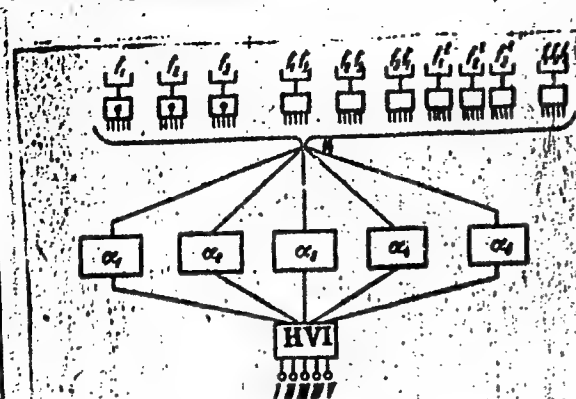


Fig. 2. The Alpha recognition system as a prediction filter

v_1 - input image; α_1 and α_2 groups of associating cells; HVI - higher voltage indicator

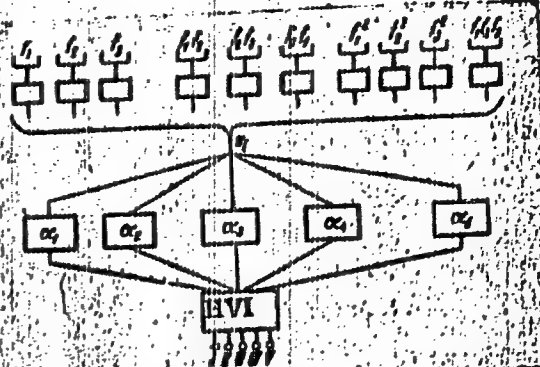


Fig. 3. The Alpha simplified binary prediction system

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ACC NR: AP6024366

with the quantities $+1$ and -1 , i.e., in the event of realization of the system, the simplicity of its relay design; 2) the possibility of predicting not only processes depicted by curves but also cyclic processes such as, e.g. the prediction of the outcome of treatment of patients. Characteristically, in this case the only information is the presence or absence of a feature. Hence the Kolmogorov formula (as applied to the discrete Alpha filter) may also be extended to such prediction problems and, e.g. may account for and hence also condition the success of many prediction experiments. Thus, e.g. Brailovskiy and Land (Avtomatika, 1964, no. 3) utilized twelve input features in their experiments to predict the outcome of the treatment of burns: surface area of wound, location of burn, degree of burn, age of the patient, attendant diseases, complications, data of blood and urine analysis, etc., utilized separately as well as in combinations of two, three, etc. Orig. art. has: 1 formula, 7 figures, 2 tables.

SUB CODE: 09, 12/ SUBM DATE: 17Apr64/ ORIG REF: 006/ OTH REF: 003

Card 4/4

VORONOVA, L.V., Cand Bio Sci—(diss) "Data on the study of antigens used in the agglutination reaction for the diagnosis of brucellosis in humans and animals." Odessa, 1958. 12 pp (Min of Higher Education UkrSSR. Odessa State U in I.I.Mechnikov), 200 copies (KJ, 44-58, 121)

- 22 -

MAL'TSEV, A. N.; KOBOZEV, N. I.; AGRONOMOV, A. Ye.; VORONOVA, L. V.

Effect of the size of granule carrier on the macroscopic
distribution of platinum in adsorption catalysts. Zhur. fiz.
khim. 37 no. 3:628-633 Mr '63. (MIRA 17:5)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

STRIZHEVSKIY, I.I. [Stryzheva'nyi, I.I.]; KORDYSH, Ye.I. [Kordysh, IE.I.];
VORONOVA, L.Ya.; MOKHOVA, V.S.; SOBODYR', S.G. [Sobodyr, S.H.];
SHLYAKHOVER, I.V.; ESTRIN, S.M.

Balloon filling with pyrolysis acetylene. Khim. prom. [Ukr] no.1:
69-71 Ja-Mr '65. (MIRA 18:4)

Shlyakhofer, L. V., Sabodai

TITLE: Filling of cylinders with acetylene made by pyrolysis

TITLE: Filling of cylinders with liquid nitrogen

organic solvents

ABSTRACT Unlike acetylene made from carbide, acetylene made by pyrolysis contains the following impurities: methyl acetylene, propadiene, diacetylene, diacetylene, and acetylene. The acetylene made by pyrolysis was purified by passing it through a series of four cylinders containing impurities adsorbing materials. The acetylene was then analyzed for the following impurities: methyl acetylene 0.01-0.02; propadiene 0.02-0.03; diacetylene 0.03-0.05. Prior to the experiment this acetylene was

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ACCESSION NR: AP5006845

subjected to a chromatographic analysis and to a ionization-flame detector test. In the course of experiments with discharging of acetylene from the cylinder at the rate of 0.5-0.5m³/hr in the presence of an ambient air temperature of 21°C it was found that as the temperature increased, the content of impurities in the acetylene emerging from the cylinder increased. With increasing temperature the

SUBMITTED: 20May64

ENCL: 00

UNIT CODE: 0000

NO REF SOV: 004

OTHER: 002

Card 2/2

VORONOVA, L.Ye.

Cancer of the larynx in a girl aged 15; one observation. Vop.
onk. 11 no.7:107-108 '65. (MIRA 18:9)

1. Iz otorinolaringologicheskogo otdeleniya (zav.- doktor med.
nauk M.G. Baradulina) Gosudarstvennogo nauchno-issledovatel'-
skogo onkologicheskogo instituta imeni Gertsena (dir.- prof.
A.N. Novikov).

IVANOVA, A.; VDOVINA, R.; VORONOVA, M.

Thoughts, suggestions and wishes. Sov.profssoiuzy 19 no.5:18-19
Mr '63. (MIRA 16:2)

1. Organizator profsoyuznoy gruppy tsekha pryadil'nykh mashin pryadil'noy fabriki No.2 Orekhovskogo ordena Lenina khlopchatobumazhnogo kombinata imeni K.I. Nikolayevoj (for Ivanova).
2. Organizator profsoyuznoy gruppy vorosereznogo tsekha otbel'no-krasil'noy fabriki Orekhovskogo ordena Lenina khlopchatobumazhnogo kombinata imeni K.I. Nikolayevoj (for Vdovina).
3. Organizator profsoyuznoy gruppy 3-go tsekha tkatskoy fabriki No.1 Orekhovskogo ordena Lenina khlopchatobumazhnogo kombinata imeni K.I. Nikolayevoj (for Voronova).

(Orekhovt-Zuryvo--Cotton manufacture)
(Trade unions--Officers)

VORONOVA, M.A.

Palynological investigations of Lower Cretaceous sediments in
the Dnieper-Donets Lowland. Geol. zhur. 24 no.5: 94-100 '64.
(MIRA 17:12)

1. Institut geologicheskikh nauk AN UkrSSR.

CHUPRIN, N.Ye.[Chupryn, N.E.]; VORONOVA, M.A.

New data on the stratigraphy of Lower Cretaceous sediments
in the northwestern part of the Dnieper-Donets Lowland. Geol.
zhur. 23 no.2:87-90 '63. (MIRA 16:6)

1. Chernigovskaya ekspeditsiya Ukrainakogo nauchno-issledovatel'-
skogo gornorudnogo instituta i Institut geologicheskikh nauk
AN UkrSSR.

(Dnieper-Donets Lowland—Geology, Stratigraphic)

VORONOVA, M.G.

Treatment of trichomoniasis in women with para-amino-salicylic acid. Kaz.med.zhur. no.5:36-37 8-0 '62. (MIRA 16:4)

1. Pervaya kafedra akusherstva i ginekologii (zav. - prof. N.Ye.Sidorov) Kazanskogo gosudarstvennogo instituta dlya usovershenstvovaniya vrachey imeni V.I.Lenina.
(TRICHOMONIASIS) (SALICYLIC ACID)

ACCESSION NR: AP4040730

S/0192/64/005/003/0482/0489

TITLE: Donor-acceptor properties of the siloxane bond

AUTHOR: Voronkov, M. G. ; Daych, A. Ya.

SOURCE: Zhurnal strukturnoy khimii, v. 5, no. 3, 1964, 482-489

TOPIC TAGS: siloxane bond, alkoxysilane, aryloxysilane methylsiloxane, donor acceptor property, electro acceptor bond, electro donor bond, physico chemical method

ABSTRACT: To explain the mechanism of heterolytic splitting of the Si-O bond in siloxanes and alkoxysilanes and to clarify the bond nature, more than 300 binary systems of alkoxysilanes, aryloxysilanes, methylsiloxanes and their organic analogues with electro-acceptor and electro-donor bonds were analyzed by physico-chemical methods. It has been shown that both electro-donor and electro-acceptor properties of alkoxysilanes are enhanced by a decreasing number of alkoxygroups at the central silicon atom; this is explained by both the sterical factor and the increasing polarity of the Si-O bond. A new type of molecular interaction between alkoxysilanes and polar

Card

1/2

ACCESSION NR: AP4040730

benzene derivatives of the C_6H_5X was found. The composition of stratified systems formed by methylsiloxanes with organic compounds was determined. Donor/acceptor properties of the siloxane bond $Si-O(Si)$ in siloxanes in relationship to organic molecules are usually not apparent and can but rarely be observed. Electro-donor properties decrease in the series $C-O-C > C_{alk}-O-Si > C_{ar}-O-Si \gg Si-O-Si > (O)-Si-O-Si$ while the electro-acceptor properties of the silicon atom decrease in another order $Si_{ar}-O-Si > C_{alk}-O-Si \gg Si-O-Si$. Detailed experimental data supporting the above conclusions will be published in a series of articles on this subject. Orig. art. has: 1 figure, 1 formula, 1 table.

ASSOCIATION: Institut organicheskogo sinteza AN LatvSSR (Institute of Organic Synthesis, AN LatvSSR)

SUBMITTED: 17Mar63 /

ENCL: 00

SUB CODE: 10

NR REF SOV: 005

OTHER: 004

Card

2/2

IVANOV, A.A.; VORONOVA, M.L.

Sylvinite cap of the Verkhnekamsk deposit. Trudy VSEGEI 99:181-190
'63. (MIRA 17:6)

KORENEVSKIY, S.M.; VORONOVA, M.L.

New data on the geology and potassium-bearing salt structures of
Ozinki and Gremukhiy. Trudy VSEGEI 99:215-232 '63. (MIRA 17:6)

VORONOVA, M. L.

USSR/Minerals - Halurgy

Card 1/1 Pub. 22 - 30/40

Authors : Voronova, M. L.

Title : Discovery of polyhalite and kainite in the sulfate saliferous stratum of Uzun-Su

Periodical : Dok. AN SSSR 99/3, 449-450, Nov 21, 1954

Abstract : The discovery of polyhalite and kainite minerals in the sulfate saliferous stratum of Uzun-Su in Turkmen-SSR, is announced. The structure and physico-chemical properties of these minerals are described. Illustrations.

Institution : All-Union Scientific Research Institute of Halurgy

Presented by: Academician N. M. Strakhov, September 20, 1954

VORONOVA, M. N.

"Psychic Disorders in Hypertension. (Experimental Clinical Physiological Investigation)." Cand Med Sci, Molotov State Medical Inst, Molotov, 1954. (KL, No 2, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

VORONOVA, M.L.; KORENEVSKIY, S.M.; BODUNOV, V.S.

Geology and mineropetrographic characteristics of the halogen
rocks in the Linevka structure. Trudy VSEGEI 83:117-127 '62.
(MIRA 16:9)

VORONOVA, M.L.

Howlite in Permian salineferous rocks of the European part
of the U.S.S.R. Inform. sbor. VSEGEI no.55:77-82 '62.
(MIRA 17:1)

VORONOVA, M.L.

Find of the new mineral strontium and potassium sulfate.
Inform. sbor. VSEGEI no.55:111-113 '62. (MIRA 17:1)

VORONOVA, M.L.

"Kalistrontite," a new potassium strontium sulfate. Zap.Vses.
min.ob-va 91 no.6:712-717 '62. (MIRA 16:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskii institut
(VSEGEI), Leningrad.
(Sulfates) (Strontium) (Potassium)

VORONOVA, M.S.

The rust *Cronartium ribicola* on black currants. Zashch. rast. ot
vred. 1 bol. 8 no.7:50 J1 '63. (MIRA 16:9)

VORONOVA, M.S.

SHAMPAN'YA, Pol' [Champagnet, Paul] VORONOVA, M.S., [translator]; LEBEDEV, V.V.,
kandidat sel'skokhozyaystvennykh nauk, nauchnyy redaktor; IZOTOVA,
G.M., redaktor; FEDOROVA, A.P., tekhnicheskiy redaktor

[Pruning of fruit trees. Translated from the English] Obreska
plodovykh derev'ev. Perevod s angliiskogo. Moskva, Gos. izd-vo
sel'khoz. lit-ry, 1957. 158 p. (MLRA 10:6)
(Pruning)

KOVALENKO, V.M.; NIKIFOROV, I.N.; Prinimali uchastiye: VORONOVA, M.Ye.;
KORNEYEVA, N.M.; UZBEKOVA, A.Kh.; YERMOLAYEVA, L.I.

New gasoline-, oil-, fat-, and water-resistant paint coatings.
Lakokras. mat. i ikh prim. no.5:33-35 '63. (MIRA 16:11)

VORONOVA, Mariya Zinov'yevna; TSEDILIN, I.V., red.

[Analysis of the administrative operations of fishing
industry enterprises] Analiz khoziaistvennoi deiatel'-
nosti predpriatii rybnoi promyshlennosti. Moskva, Fi-
nansy, 1965. 103 p. (MIRA 18:4)

VORONOVICH, N.

Development of the medical network in Pinsk District. Zdrav. Belor.
5 no.3:16 Nr '59. (MIRA 12:7)

1. Zaveduyushchiy Pinski gorodskim otdelem zdavookhraneniya.
(PINSK DISTRICT--PUBLIC HEALTH)

SAMSONOV, G.V., otv. red.; OBOLONCHIK, V.A., kand. khim. nauk,
red.; VORONOVA, N.A., doktor tekhn. nauk, red.;
GILELAKH, V.I., red.

[Rare and rare-earth elements in technology] Redkio i
redkozemel'nye elementy v tekhniko. Kiev, Naukovy dumka,
1964. 129 p. (MIRA 17:9)

1. Akademiya nauk URSS, Kiev. Instytut problem materialo-
znavstva. 2. Chlen-korrespondent AN Ukr.SSR i Institut problem mate-
rialovedeniya AN Ukr.SSR (for Obolonchik). 3. Institut problem ma-
terialovedeniya AN Ukr.SSR (for Samsonov).

16

MEASUREMENT OF TEMPERATURE OF MELTEN IRON WITH IMMERSION THERMOCOUPLES. N. A. VORONOVA AND F. P. BONDAROVSKI. Henry Bratcher (Altadena, Calif.). Translation No. 2253, 8 pages. From Zavodskaya Laboratoriya (Factory Laboratory). v. 14, Feb. 1948, p. 242-244.

Describes new type of protecting tube for Pt-Pt/Rh immersion thermocouples, which is claimed to extend their life to more than three 20-min. measurements.

DETAILS: 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 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621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 841. 842. 843. 844. 845. 846. 847. 848. 849. 850. 851. 852. 853. 854. 855. 856. 857. 858. 859. 860. 861. 862. 863. 864. 865. 866. 867. 868. 869. 870. 871. 872. 873. 874. 875. 876. 877. 878. 879. 880. 881. 882. 883. 884. 885. 886. 887. 888. 889. 890. 891. 892. 893. 894. 895. 896. 897. 898. 899. 900. 901. 902. 903. 904. 905. 906. 907. 908. 909. 910. 911. 912. 913. 914. 915. 916. 917. 918. 919. 920. 921. 922. 923. 924. 925. 926. 927. 928. 929. 930. 931. 932. 933. 934. 935. 936. 937. 938. 939. 940. 941. 942. 943. 944. 945. 946. 947. 948. 949. 950. 951. 952. 953. 954. 955. 956. 957. 958. 959. 960. 961. 962. 963. 964. 965. 966. 967. 968. 969. 970. 971. 972. 973. 974. 975. 976. 977. 978. 979. 980. 981. 982. 983. 984. 985. 986. 987. 988. 989. 990. 991. 992. 993. 994. 995. 996. 997. 998. 999. 1000. 1001. 1002. 1003. 1004. 1005. 1006. 1007. 1008. 1009. 1010. 1011. 1012. 1013. 1014. 1015. 1016. 1017. 1018. 1019. 1020. 1021. 1022. 1023. 1024. 1025. 1026. 1027. 1028. 1029. 1030. 1031. 1032. 1033. 1034. 1035. 1036. 1037. 1038. 1039. 1040. 1041. 1042. 1043. 1044. 1045. 1046. 1047. 1048. 1049. 1050. 1051. 1052. 1053. 1054. 1055. 1056. 1057. 1058. 1059. 1060. 1061. 1062. 1063. 1064. 1065. 1066. 1067. 1068. 1069. 1070. 1071. 1072. 1073. 1074. 1075. 1076. 1077. 1078. 1079. 1080. 1081. 1082. 1083. 1084. 1085. 1086. 1087. 1088. 1089. 1090. 1091. 1092. 1093. 1094. 1095. 1096. 1097. 1098. 1099. 1100. 1101. 1102. 1103. 1104. 1105. 1106. 1107. 1108. 1109. 1110. 1111. 1112. 1113. 1114. 1115. 1116. 1117. 1118. 1119. 1120. 1121. 1122. 1123. 1124. 1125. 1126. 1127. 1128. 1129. 1130. 1131. 1132. 1133. 1134. 1135. 1136. 1137. 1138. 1139. 1140. 1141. 1142. 1143. 1144. 1145. 1146. 1147. 1148. 1149. 1150. 1151. 1152. 1153. 1154. 1155. 1156. 1157. 1158. 1159. 1160. 1161. 1162. 1163. 1164. 1165. 1166. 1167. 1168. 1169. 1170. 1171. 1172. 1173. 1174. 1175. 1176. 1177. 1178. 1179. 1180. 1181. 1182. 1183. 1184. 1185. 1186. 1187. 1188. 1189. 1190. 1191. 1192. 1193. 1194. 1195. 1196. 1197. 1198. 1199. 1200. 1201. 1202. 1203. 1204. 1205. 1206. 1207. 1208. 1209. 1210. 1211. 1212. 1213. 1214. 1215. 1216. 1217. 1218. 1219. 1220. 1221. 1222. 1223. 1224. 1225. 1226. 1227. 1228. 1229. 1230. 1231. 1232. 1233. 1234. 1235. 1236. 1237. 1238. 1239. 1240. 1241. 1242. 1243. 1244. 1245. 1246. 1247. 1248. 1249. 1250. 1251. 1252. 1253. 1254. 1255. 1256. 1257. 1258. 1259. 1260. 1261. 1262. 1263. 1264. 1265. 1266. 1267. 1268. 1269. 1270. 1271. 1272. 1273. 1274. 1275. 1276. 1277. 1278. 1279. 1280. 1281. 1282. 1283. 1284. 1285. 1286. 1287. 1288. 1289. 1290. 1291. 1292. 1293. 1294. 1295. 1296. 1297. 1298. 1299. 1300. 1301. 1302. 1303. 1304. 1305. 1306. 1307. 1308. 1309. 1310. 1311. 1312. 1313. 1314. 1315. 1316. 1317. 1318. 1319. 1320. 1321. 1322. 1323. 1324. 1325. 1326. 1327. 1328. 1329. 1330. 1331. 1332. 1333. 1334. 1335. 1336. 1337. 1338. 1339. 1340. 1341. 1342. 1343. 1344. 1345. 1346. 1347. 1348. 1349. 1350. 1351. 1352. 1353. 1354. 1355. 1356. 1357. 1358. 1359. 1360. 1361. 1362. 1363. 1364. 1365. 1366. 1367. 1368. 1369. 1370. 1371. 1372. 1373. 1374. 1375. 1376. 1377. 1378. 1379. 1380. 1381. 1382. 1383. 1384. 1385. 1386. 1387. 1388. 1389. 1390. 1391. 1392. 1393. 1394. 1395. 1396. 1397. 1398. 1399. 1400. 1401. 1402. 1403. 1404. 1405. 1406. 1407. 1408. 1409. 1410. 1411. 1412. 1413. 1414. 1415. 1416. 1417. 1418. 1419. 1420. 1421. 1422. 1423. 1424. 1425. 1426. 1427. 1428. 1429. 1430. 1431. 1432. 1433. 1434. 1435. 1436. 1437. 1438. 1439. 1440. 1441. 1442. 1443. 1444. 1445. 1446. 1447. 1448. 1449. 1450. 1451. 1452. 1453. 1454. 1455. 1456. 1457. 1458. 1459. 1460. 1461. 1462. 1463. 1464. 1465. 1466. 1467. 1468. 1469. 1470. 1471. 1472. 1473. 1474. 1475. 1476. 1477. 1478. 1479. 1480. 1481. 1482. 1483. 1484. 1485. 1486. 1487. 1488. 1489. 1490. 1491. 1492. 1493. 1494. 1495. 1496. 1497. 1498. 1499. 1500. 1501. 1502. 1503. 1504. 1505. 1506. 1507. 1508. 1509. 1510. 1511. 1512. 1513. 1514. 1515. 1516. 1517. 1518. 1519. 1520. 1521. 1522. 1523. 1524. 1525. 1526. 1527. 1528. 1529. 1530. 1531. 1532. 1533. 1534. 1535. 1536. 1537. 1538. 1539. 1540. 1541. 1542. 1543. 1544. 1545. 1546. 1547. 1548. 1549. 1550. 1551. 1552. 1553. 1554. 1555. 1556. 1557. 1558. 1559. 1560. 1561. 1562. 1563. 1564. 1565. 1566. 1567. 1568. 1569. 1570. 1571. 1572. 1573. 1574. 1575. 1576. 1577. 1578. 1579. 1580. 1581. 1582. 1583. 1584. 1585. 1586. 1587. 1588. 1589. 1590. 1591. 1592. 1593. 1594. 1595. 1596. 1597. 1598. 1599. 1600. 1601. 1602. 1603. 1604. 1605. 1606. 1607. 1608. 1609. 1610. 1611. 1612. 1613. 1614. 1615. 1616. 1617. 1618. 1619. 1620. 1621. 1622. 1623. 1624. 1625. 1626. 1627. 1628. 1629. 1630. 1631. 1632. 1633. 1634. 1635. 1636. 1637. 1638. 1639. 1640. 1641. 1642. 1643. 1644. 1645. 1646. 1647. 1648. 1649. 1650. 1651. 1652. 1653. 1654. 1655. 1656. 1657. 1658. 1659. 1660. 1661. 1662. 1663. 1664. 1665. 1666. 1667. 1668. 1669. 1670. 1671. 1672. 1673. 1674. 1675. 1676. 1677. 1678. 1679. 1680. 1681. 1682. 1683. 1684. 1685. 1686. 1687. 1688. 1689. 1690. 1691. 1692. 1693. 1694. 1695. 1696. 1697. 1698. 1699. 1700. 1701. 1702. 1703. 1704. 1705. 1706. 1707. 1708. 1709. 1710. 1711. 1712. 1713. 1714. 1715. 1716. 1717. 1718. 1719. 1720. 1721. 1722. 1723. 1724. 1725. 1726. 1727. 1728. 1729. 1730. 1731. 1732. 1733. 1734. 1735. 1736. 1737. 1738. 1739. 1740. 1741. 1742. 1743. 1744. 1745. 1746. 1747. 1748. 1749. 1750. 1751. 1752. 1753. 1754. 1755. 1756. 1757. 1758. 1759. 1760. 1761. 1762. 1763. 1764. 1765. 1766. 1767. 1768. 1769. 1770. 1771. 1772. 1773. 1774. 1775. 1776. 1777. 1778. 1779. 1780. 1781. 1782. 1783. 1784. 1785. 1786. 1787. 1788. 1789. 1790. 1791. 1792. 1793. 1794. 1795. 1796. 1797. 1798. 1799. 1800. 1801. 1802. 1803. 1804. 1805. 1806. 1807. 1808. 1809. 1810. 1811. 1812. 1813. 1814. 1815. 1816. 1817. 1818. 1819. 1820. 1821. 1822. 1823. 1824. 1825. 1826. 1827. 1828. 1829. 1830. 1831. 1832. 1833. 1834. 1835. 1836. 1837. 1838. 1839. 1840. 1841. 1842. 1843. 1844. 1845. 1846. 1847. 1848. 1849. 1850. 1851. 1852. 1853. 1854. 1855. 1856. 1857. 1858. 1859. 1860. 1861. 1862. 1863. 1864. 1865. 1866. 1867. 1868. 1869. 1870. 1871. 1872. 1873. 1874. 1875. 1876. 1877. 1878. 1879. 1880. 1881. 1882. 1883. 1884. 1885. 1886. 1887. 1888. 1889. 1890. 1891. 1892. 1893. 1894. 1895. 1896. 1897. 1898. 1899. 1900. 1901. 1902. 1903. 1904. 1905. 1906. 1907. 1908. 1909. 1910. 1911. 1912. 1913. 1914. 1915. 1916. 1917. 1918. 1919. 1920. 1921. 1922. 1923. 1924. 1925. 1926. 1927. 1928. 1929. 1930. 1931. 1932. 1933. 1934. 1935. 1936. 1937. 1938. 1939. 1940. 1941. 1942. 1943. 1944. 1945. 1946. 1947. 1948. 1949. 1950. 1951. 1952. 1953. 1954. 1955. 1956. 1957. 1958. 1959. 1960. 1961. 1962. 1963. 1964. 1965. 1966. 1967. 1968. 1969. 1970. 1971. 1972. 1973. 1974. 1975. 1976. 1977. 1978. 1979. 1980. 1981. 1982. 1983. 1984. 1985. 1986. 1987. 1988. 1989. 1990. 1991. 1992. 1993. 1994. 1995. 1996. 1997. 1998. 1999. 2000. 2001. 2002. 2003. 2004. 2005. 2006. 2007. 2008. 2009. 2010. 2011. 2012. 2013. 2014. 2015. 2016. 2017. 2018. 2019. 2020. 2021. 2022. 2023. 2024. 2025. 2026. 2027. 2028. 2029. 2030. 2031. 2032. 2033. 2034. 2035. 2036. 2037. 2038. 2039. 2040. 2041. 2042. 2043. 2044. 2045. 2046. 2047. 2048. 2049. 2050. 2051. 2052. 2053. 2054. 2055. 2056. 2057. 2058. 2059. 2060. 2061. 2062. 2063. 2064. 2065. 2066. 2067. 2068. 2069. 2070. 2071. 2072. 2073. 2074. 2075. 2076. 2077. 2078. 2079. 2080. 2081. 2082. 2083. 2084. 2085. 2086. 2087. 2088. 2089. 2090. 2091. 2092. 2093. 2094. 2095. 2096. 2097. 2098. 2099. 2100. 2101. 2102. 2103. 2104. 2105. 2106. 2107. 2108. 2109. 2110. 2111. 2112. 2113. 2114. 2115. 2116. 2117. 2118. 2119. 2120. 2121. 2122. 2123. 2124. 2125. 2126. 2127. 2128. 2129. 2130. 2131. 2132. 2133. 2134. 2135. 2136. 2137. 2138. 2139. 2140. 2141. 2142. 2143. 2144. 2145. 2146. 2147. 2148. 2149. 2150. 2151. 2152. 2153. 2154. 2155. 2156. 2157. 2158. 2159. 2160. 2161. 2162. 2163. 2164. 2165. 2166. 2167. 2168. 2169. 2170. 2171. 2172. 2173. 2174. 2175. 2176. 2177. 2178. 2179. 2180. 2181. 2182. 2183. 2184. 2185. 2186. 2187. 2188. 2189. 2190. 2191. 2192. 2193. 2194. 2195. 2196. 2197. 2198. 21

LUGOVTSOV, M.V.; VORONOVA, N.A., kandidat tekhnicheskikh nauk

Wear-resistant cast iron ball mills. Trudy Inst. Chern. met. AN URSS
3:50-61 '49. (MIRA 8:7)

1. Deystvitel'nyy chlen Akademii nauk USSR. (for Lugovtsov).
(Milling machinery)

PUZANOV, M. A., VORONOVA, N. A., SUSLOV, V. A.

Cast Iron

Effect of the interdendritic form of graphite separation on the wear resistance of cast iron.
Trudy Inst. chern. met. AN URSR No. 5, 1951.

9. Monthly List of Russian Accessions, Library of Congress, December 1952-1953, Uncl.

PA 17/100

VORONOVA, N. A.

USSR/Metals - Cast Iron, Casting, Method Sep 51

"Overheating Cast Iron in the Cupola Receiver by
Blowing With Oxygen," N. A. Voronova, Cand Tech
Sci, Acad Sci Ukrainian SSR, Inst of Ferrous Met-
allurgy

"Litey Proiz" No 9, pp 15-18

Method is based on overheating cast iron at the
expense of heat produced by reactions of oxidiz-
ing Si, Mn, and C with blow of oxygen. Describes
construction of cupola receivers, and discusses
oxygen consumption and economic aspect of process.
Addnl production cost of castings amounts to from
3% in overheating by 70-80° to 7.5% in overheating
by 150-170°. 1971E6

VORONOVA, N. A., SUSLOV, V. A., PUZANOV, M. A.

Cast Iron

Effect of the interdendritic form of graphite separation on the wear resistance of cast iron. Trudy Inst. chern. met. AN URSR No. 5, 1951.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

VORONOVA, N. A.

"Superheating Cast Iron by O₂ Injection in the Cupola Well," Lit.
Proiz., No.9, pp. 15-17, 1951

Evaluation B-74606

"APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R001860920020-3

APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R001860920020-3"

VORONOVA, N. A.

"Smelting of Low-Carbon Cast Iron in the Converter and of Highly Over-refined Cast Iron in the Forehearth and Hearth of a Cupola under Application of Oxygen." Acad Sci USSR, Inst of Metallurgy imeni A. A. Baykov, Moscow-Dnepropetrovsk, 1955. (Dissertation for the Degree of Doctor of Technical Sciences)

SO: M-972, 20 Feb 56

VORONOVA, N.A.; TRIGUB, O.A.

Changes in the chemical composition and temperature of metal
during the blowing oxygen in the cupola forehearth. Lit.proizv.
no.7:17-20 J1'55. (MIRA 8:10)
(Founding) (Metallurgical analysis)

"APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R001860920020-3

APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R001860920020-3"

VORONOVA, N. A.; FEDOROVA, S. A.; TKACH, N. T.

Cast iron with bainite structure for making cylindrical pebbles.
Trudy Giprotsement no. 26:54-62 '63. (MIRA 17:5)

L 43766-66 EWT(m)/T/EWP(i) IJP(c) WW/PM

ACC NR: AP6029919

(A)

SOURCE CODE: UR/0413/66/000/015/0088/0088

INVENTOR: Nikolayev, A. F.; Zyryanova, T. A.; Balayev, G. A.; Voronova, N. A.;
Grigor'yeva, G. M.

11
B

ORG: none

TITLE: Preparative method for phosphorus-containing epoxy resins. ¹⁵ Class 39,
No. 184443, [announced by the Leningrad Technological Institute im. Lenovert
(Leningradskiy tekhnologicheskii institut)]

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 88

TOPIC TAGS: fire resistant material, epoxy plastic

ABSTRACT: An Author Certificate has been issued for a preparative method for phosphorus-containing epoxy resins based on phosphonitrile chloride oligomers and epoxy compounds in the presence of caustic soda. To improve the fire resistance of the resins and to simplify the method, the phosphonitrile chloride oligomers are condensed with glycidol. [SM]

SUB CODE: 11/ SUBM DATE: 09Jul64/ ATA PRESS-5268

Card 1/1 28/17

UDC: 678.64'42 678.85

NIKOLAYEV, A.F.; TRIZNO, M.S.; VORONOVA, N.A.; TOPORNINA, V.M.

Glass textolites based on an epoxy-novolak binder. Plast. massy
no.2:13-15 '66. (MIRA 19:2)

STOVPCHENKO, P.I.; VORONOVA, N.A.

Continucus casting of balls. Lit. proizv. no.3:9-13 Mr '64.
(MIRA 18:9)

NIKOLAEV, A.F.; TRIZNO, M.S.; VORDHOVA, N.A.; PETROVA, L.A.; TOPORNINA, V.M.

Properties of hardened and unhardened epoxy novolac compositions.
Plast. massy no. 4:76-79 '55. (MIRA 18:6)

VORONOVA, N.A., doktor tekhn. nauk; TESLYUK, A.K.

Bucket teeth of the EKG-4 excavator made of chromium-molybdenum steel. Met. 1 gorncrud. prom. no.1:72-74 Ju-F '65.

(MIRA 18:3)

VORONOVA, N.A., doktor tekhn.nauk; TESLYUK, A.K., inzh.; NIKANDROVA, N.S., inzh.

Abrasion-resistant alloys for the bucket teeth of the EKG-4
excavator. Gor.zhur. no.3:45-48 Mr '65. (MIRA 18:5)

1. Institut chernoy metallurgii, Dnepropetrovsk.

VORONOVA, N.A., doktor tekhn. nauk; GINZBURG, I.M., inzh.; YEMEL'YANOV, I.Yu.,
~~inzh.~~; GASPAREVA, S.H., inzh.; KONSTANTINOVSKIY, V.M., inzh.

Cylpebs form low-carbon cast iron and conditions for its use.
TSement 30 no.5:15-17 S-O '64. (MIRA 17:12)

VORONOVA, N.A., doktor tekhn.nauk; TESLYUK, A.K.; MIROSHNICHENKO, G.L.;
KUZNETSOVA, V.P.

Composite teeth for the EKG-4 excavator bucket. Met. i gornorud.
prom. no. 2:53-54 Mr-Ap '64. (MIRA 17:9)

VORONOVA, N. A., doktor tekhn. nauk; STOVPCHENKO, P. I., inzh.;
KRIVOSHEYEV, V. A., inzh.; PROTSKIY, N. Ye., inzh.;
ZAYATS, A. P., inzh.; NESTEROVA, G. V., inzh.

Ball instead of cone mandrels for automatic pipe mills.
Me. i gornorud. prom. no. 3:20-31 My-Je '63.

1. Nikopol'skiy yuzhnotrubby zavod (for Protskiy, Zayats, Nesterova).

VORONOVA, N.A.; MOGILEVTSEV, O.A.

Using cerium for the inoculation of cast iron. Metalloved. 1
term. obr. met. no.8:38-42 Ag '63. (MIRA 16:10)

1. Dnepropetrovskiy institut chernoy metallurgii.

VORONOVA, N.A., doktor tekhn. nauk; STOVPUHENKO, P.I., inzh.;
KRIVOSHEYEV, V.A., inzh.; PROTSKIY, N.Ye., inzh.; ZAYATS, A.P.,
inzh.; NESTEROVA, G.V., inzh.

Cast ball mandrels for pipe-rolling mills. Mashinostroenie
no.3:54-55 My-Je '63. (MIRA 16:7)

1. Institut chernoy metallurgii AN UkrSSR (for Voronova,
Stovpchenko, Krivosheyev). 2. Nikopol'skiy yuzhnotrudnyy
zavod (for Protskiy, Zayats, Nesterova).
(Pipe mills)

VORONOVA, N.A.; MOGILEVTSY, O.A.; GRAYFER, M.Z.

Effect of the material of the crucible (ladle) on the residual content
of cerium in cast iron being held under a reducing layer. Lit. proizv.
no. 4: 20-21 Ap '63. (MIRA 16:4)
(Cast iron—Metallurgy) (Crucibles)

NIKOLAYEV, A.F.; USHAKOV, S.N.; VISHNEVETSKAYA, L.P.; VORONOVA, N.A.

Preparation and properties of copolymers of vinyl alcohol and
vinylamine. Vysokom.sped. 5 no.4:547-551 Ap '63. (MIRA 16:5)

1. Leningradskiy tekhnologicheskij institut imeni Lensoveta.
(Vinyl alcohol) (Vinylamine) (Polymers)

VORONOVA, N.A.; GINZBURG, Yu.N.; TOVAROV, V.V.; TKACH, M.T.; Prinimali
uchastiye: OSKALENKO, G.N.; KOROTAYEVA, V.P.; POD'YACHEVA, I.B.;
NIKAMOROVA, N.A.

The problem of raising the quality of cylindrical grinding
bodies. Trudy Giprotsement no.24:119-144 '62. (MIRA 16:4)
(Milling machinery)

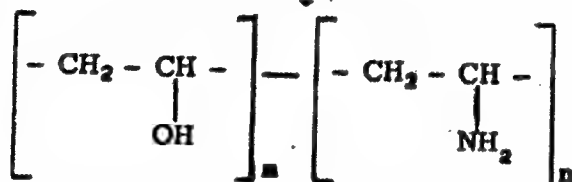
VORONOVA, N.A.
AID Nr. 980-15 31 May

COPOLYMERS OF VINYL ALCOHOL AND VINYLAMINE (USSR)

Nikolayev, A. F.; S. N. Ushakov, L. P. Vishnevetskaya, and N. A. Voronova.
Vysokomolekulyarnyye soyedineniya, v. 5, no. 4, Apr 1963, 547-551.

S/190/63/005/004/011/020

Copolymers of vinyl alcohol and vinylamine (I) of varying compositions and the general formula



were prepared by reacting copolymers of vinyl acetate and N-vinylphthalimide with hydrazine hydrate at 85 to 110°C for 2 to 6 hrs, depending on the N-vinylphthalimide content of the initial copolymer. Final products containing more than 10% I were isolated by precipitating them twice from water solution poured into alcohol, and those with a higher I content, by Reynolds' method.

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AID Nr. 980-15 31 May

COPOLYMERS OF VINYL ALCOHOL [Cont'd]

8/190/63/005/004/011/020

The final copolymers are solids soluble in solvents which will dissolve poly-vinyl alcohol. Copolymers containing 12 to 44 mol % I have the following properties: glass transition temperature, 57 to 46°C; softening point, 125 to 100°C; Vicat softening point, 84 to 74°C; bending strength, 200 to 500 kg/cm²; and Vickers hardness, 14 to 19 kg/mm². The glass transition temperature, heat resistance, and softening point of the copolymers drop with an increase of the amino group content. The study was carried out at the Leningrad Technological Institute imeni Lensevet.

[BAO]

Card 2/2

VORONOVA, N.A.; KHIL'SHLEYN, Yu.N.; MOGILEVTSEV, O.A.; DANILITS, V.N.

Use of natural gas in large cupola furnaces. Lit. yroiz. no. 11:1-2
N '62. (MIRA 15:12)

(Cupola furnaces)

VORONOVA, N.A., doktor tekhn.nauk; KHIL'SHLEYN, Yu.N., inzh.

Top blowing of cast iron by oxygen in reverberatory furnaces.
Met. i gornorud. prom. no.2:65-70 Mr-Ap '62. (MIRA 15:11)

1. Institut chernoy metallurgii AN UkrSSR.
(Cast iron--Metallurgy)

NIKOLAYEV, A.P.; USHAKOV, S.N.; VISHNEVETSKAYA, L.P.; VORONOVA, N.A.;
RODINA, E.I.

Copolymerization of vinyl acetate and vinylphthalimide.
Vysokom.soed. 4 no.7:1053-1059 JI '62. (MIRA 15:7)

1. Leningradskiy tekhnologicheskij institut imeni Lenooveta.
(Vinyl acetate) (Phthalimide) (Polymerization)

43422

S/190/62/004/010/009/010
B101/B186

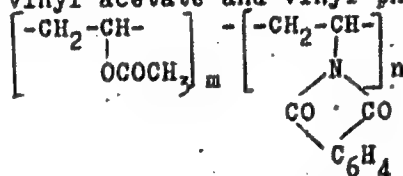
15-750

AUTHORS: Nikolayev, A. F., Ushakov, S. N., Vishnevetskaya, L. P.,
Voronova, N. A.

TITLE: Properties of copolymers of vinyl acetate with vinyl
phthalimide

PERIODICAL: Vysokomolekulyarnyye soedineniya, v. 4, no. 10, 1962,
1541-1546

TEXT: Copolymers of vinyl acetate and vinyl phthalimide (VPI) with the
general composition



their solubility in different organic solvents, their molecular weight,
vitrification temperature, Vicat heat resistance, softening point, impact
strength, bending strength, and water adsorption. Copolymers obtained by

Card 1/3

Properties of copolymers of 1...

S/190/62/004/010/009/010
B101/B186

simultaneous charging of the components in bulk or in solution, contained an excess of VPI - VPI bonds. Compensation copolymerization yielded copolymers with a low content of such bonds differing by their thermo-mechanical behavior. Results: (1) The solubility, in solvents in which polyvinyl acetate is soluble, decreased as the VPI content increased; (b) the intrinsic viscosity decreased as the VPI content increased. The molecular weight of copolymers containing little VPI was determined from $[\eta] = 1.6 \cdot 10^{-4} \bar{M}_w^{-0.7}$, where $[\eta]$ was measured in acetone, at 25°C, and \bar{M}_w is the average-weight molecular weight. \bar{M}_w of copolymers containing 14% VPI was 148100, and 146200 for 23% VPI. (3) An increase in the VPI content raised the softening point, Vicat heat resistance, and glass temperature (°C), respectively: 0 mole% VPI: 60, 37, 28; 20 mole% VPI: 75, 66, 41; 56 mole% VPI: 163, 108, 62; 98 mole% VPI: 210, 182, 135. (4) For copolymers containing 0, 23, 56, 70, and 98% VPI, the specific gravity (g/cm³) was 1.190, 1.220, 1.230, 1.235, 1.245, respectively; the water adsorption within 24 hrs (%) was 1.60, 0.7, 0.42, 0.40, and 0.39%, respectively. The Vickers Hardness number (kg/mm²) was 16-18, 15-19, 15-18, 16-19, and 18-20, respectively; the bending strength

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Properties of copolymers of ...

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B101/B186

(kg/cm²) was 530, 270, 160, 230, and 515, respectively, and the impact strength (kg/cm²) was 2.6, 1.5, 1.1, 1.2, and 3.5, respectively. All samples were hardly inflammable and very stable to gasoline and lubricating oils. A minimum of mechanical properties was observed at a VPI content of 50-60%.

ASSOCIATION: Leningradskiy tekhnologicheskii institut im. Lensoveta
(Leningrad Technological Institute imeni Lensovet)

SUBMITTED: June 22, 1961

Card 3/3

SOV/128-59-10-6/24

18(5)
AUTHORS:

Voronova, N.A., Doctor of Technical Sciences, Belyy, N.I., and
Khil'shley, Yu.N., Engineers

TITLE:

The Use of Oxygen During the Melting of Roll Cast Iron in Reverberating Furnaces

PERIODICAL:

Liteynoye proizvodstvo, 1959, Nr 10, pp 21-24 (USSR)

ABSTRACT:

The authors present a report on the use of oxygen during the melting of roll cast iron. The melting of cast iron for the casting of chilled sheet rolls and rigid rolls is done in reverberating furnaces. The cast iron, containing 2.8-3.0% C and 0.4-0.5% Si, is treated with magnesium after leaving the furnace. If the melted metal contains 1.0-1.2% Si, the duration of the desiliconizing period in the reverberating furnace amounts to 2-3 hours. More effective for the desiliconizing of cast iron is the use of technically pure oxygen. Reverberating furnaces with a melting charge of 30 tons work on the hard charge with an addition of 5-7 tons of hot cupola metal. The temperature of the metal, when it leaves the furnace is 1,430° C. Oxygen is lead in with a pressure of 12-15 atH through a fire resistant pipe, 100-150 mm of which are

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SOV/128-59-10-6/24

The Use of Oxygen During the Melting of Roll Cast Iron in Reverberating Furnaces

submerged into the metal, with an angle of 30° (Fig.1). Different materials for the change part of the pipe were tested during research. There were three types of graphite pipes, magnesium reinforced tuyeres and tuyeres of two different types of chamot. The magnesium reinforced tuyeres proved to be the most simple and the most accessible ones for the production. Table 1 shows the change of the chemical qualities and the slag, according to the data of several fusions. Table 2 gives the data for the change of the slag quantity during the melting process of fusion Nr 2. The percentage of CaO in the slag is adduced, as well as the slag weight in kg. Table 3 gives data concerning the change of oxygen percentage in the metal during the melting process. At present time all the furnaces at the Dnepropetrovsk chugunc-val'tsedelatel'nyy zavod (Dnepropetrovsk Cast Iron Roll Factory) work with oxygen. There are 1 diagram, 3 graphs and 7 tables.

Card 2/2

VORONOVA, M. A.

137-58-3-5920

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 3, p 209 (USSR)

AUTHORS: Voronova, N. A., Gutman, M. R., Troskunov, Ya. L., Armen, B. D., Leppeta, B. G.

TITLE: Low Carbon Cast Iron Rolls (Prokatnyye valki iz nizkouglerodistogo chuguna)

PERIODICAL: Tr. In-ta chernoy metallurgii. AN UkrSSR, 1957, Vol 11, pp 196-214

ABSTRACT: An account of the results of an investigation performed on rolls made of low-carbon cast iron (LCI). The LCI was obtained by blowing oxygen through Cr-Ni cast iron in a converter with a 2.5 t capacity. Rolls 515 mm, 480 mm, and 400 mm in diameter were cast into a lubricated metallic mold at temperatures between 1360°-1400°C. Two versions for the modification of LCI in the converter were investigated: Fe-Si of the SI-45 type and Si-Ca. After the Fe-Si processing of LCI containing 0.6-0.8 percent Si and 0.8-0.9 percent Cr, no carbon remained in free state, whereas after Si-Ca treatment most of the C was in the form of graphite. Compared with the LCI with Fe-Si, the LCI with Si-Ca exhibits better fluidity. In order to

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137-58-3-5920

Low Carbon Cast Iron Rolls

attain an H_B of 380-400, it is recommended that the rolls be cast at temperatures of 1360°-1400° with cast iron of the following chemical composition: in the case of Fe-Si treatment: 2.4-2.6 percent C_{tot} ; 0.9-1.0 percent Si; 0.5-0.6 percent Mn; 0.8-0.9 percent Cr; and 1.2-1.3 percent Ni; in the case of Si-Ca treatment: 2.4-2.6 percent C_{tot} ; 0.6-0.7 percent Si; 0.5-0.6 percent Mn; 0.9-1.0 percent Cr; and 1.2-1.3 percent Ni. Rolls made of cast irons exhibit uniform hardness and uniform cross-sectional microstructure. The durability of LCI rolls is 2-2.5 times that of rolls made of cast irons of standard C content; their employment has resulted in a 3.5 percent increase in productivity of rolling mills.

E. Sh.

Card 2/2

VORONOVA, N.A.; kand.tekhn.nauk; GUTMAN, M.P., inzh.; TROSKUNOV, Ya.Ya., inzh.
~~ARMEN, V.D., inzh.; LEPETA, B.G., inzh.~~

Rollers made of low-carbon cast iron. Biul.TSNIICOM no.17:27-36 '57.
(MIRA 11:4)

1.Institut chernoy metallurgii AN USSR i Stalinskiy metallurgicheskiy zavod.

(Rolling mills)

VORONOV, H.A.

INGUVTSOV, M.V.; VORONOVA, N.A.; SUSLOV, V.A.; KONASHKO, N.P.

Engine crankshafts made of oxygen-blown cast iron. Trudy Inst.
chern. met. AN URSSR 6:116-137 '53. (MIRA 11:4)
(Iron founding) (Oxygen--Industrial applications)
(Crank and crankshafts)

LOPATIN, M.I.; VORON'KO, K.P.; IVKIN, G.V.; LAKHIN, A.F.; SIMAKOV, I.I.;
KREKSHIN, N.A., podpolkovnik, red.; MEDNIKOVA, A.N., tekhn.red.

[Manual of methods for training soldiers in topography] Posobie
po metodike topograficheskoi podgotovki soldat. Izd.2., perer. i
dop. Moskva, Voen.isd-vo M-vs obor.SSSR, 1959. 136 p.
(Military topography) (MIRA 13:8)

VORONOVA, N.A.; GUTMAN, M.B.; TROSKUNOV, Ya.I.; ARMEN, B.D.; LEPPETA, B.G.

Low carbon cast iron rolls for rolling mills. Trudy Inst.chern.met.
AN URSS 11:196-214 '57. (MLRA 19:9)
(Rolls (Iron mills)) (Cast iron--Metallography)

Name: VORONOVA, Nataliya Aleksandrovna

Dissertation: The Smelting of Low-Carbon Pig Iron in
a Converter and highly Over-Refined Pig
Iron in a Forehearth and Furnace Cupola
with the use of Oxygen

Degree: Doc Tech Sci

Affiliation: Inst of Ferrous Metallurgy Acad Sci USSR

Defense Date, Place: 8 Sep 55, Council of Inst of Metallurgy
imeni Baykov, Acad Sci USSR

Certification Date: 27 Oct 56

Source: BMVO 6/57

VORONOVA, N.I.

Water conditioned reflexes and the method for their formation.

Izv.Vor.gos. ped.inst. 46:112-115 '63.

(MIRA 18:4)

ACCESSION NR: AP4037554

S/0202/64/000/002/0003/0007

AUTHOR: Agayev, Ya.; Voronkova, N. M.; Slobodchikov, S. V.

TITLE: Photomagnetic effect in p-type GaAs

SOURCE: AN TurkmSSR. Izv. Seriya fiziko-tekhnicheskikh, khimicheskikh i geologicheskikh nauk, no. 2, 1964, 3-7

TOPIC TAGS: photomagnetic effect, gallium arsenide, semiconductor, energy converter, current carrier lifetime, carrier lifetime computation

ABSTRACT: Photomagnetic effect in p-type GaAs was studied in a temperature range from 80 to 300K as a function of radiation and magnetic field intensities. The specimens had a concentration range from 10^{13} to 10^{17} cm⁻³ and were obtained by zone melting with and without iron doping. The incident illumination provided by a 500-watt tungsten lamp was modulated by a rotating chopper and filtered to pass the 600—800μ band. The magnetic field varied up

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ACCESSION NR: AP4037554

to 10 Koe and the temperature function was plotted at 8 Koe. The photomagnetic effect was observed in specimens having concentration below 10^5 cm^{-3} . The temperature function of a short-circuit photomagnetic current has an "S" shape and varies by more than an order of magnitude from 80 to 300K, which is at variance with Hurd's results (Proc. Phys. Soc. v. 79, 507, 1962). The d-c component of the illumination exerts an influence on the photomagnetic effect only at low temperatures. The photomagnetic effect as a function of incident radiation and magnetic field intensities was found to be linear in both cases. It is concluded that the magnitudes of experimental variables were confined within the limitations of the small-signal approximation which, consequently, could be used to compute the lifetime of minority carriers. Orig. art. has: 4 figures, 4 formulas, and 1 table.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN Turkmenkoy SSR
(Technical Physics Institute, AN Turkmen SSR)

Card 2/3

ACCESSION NR: AP4037554

SUBMITTED: 19Jul63

DATE ACQ: 05Jun64

ENCL: 00

SUB CODE: SS

NO REF SOV: 000

OTHER: 006

Card 3/3

VORONOVA, N.S.;
GUSAROV, V.V., inzhener, redakter; VORONOVA, N.S.; GABNER, D.G.;
NEMTSOV, N.Yu.; FRIDLYANSKIY, G.V.; MARTENS, S.L., redakter;
MODEL', B.I., tekhnicheskiiy redakter.

[Electric heating apparatus and equipment for the laboratory;
a catalog and manual] Laboratornye elektronagrevatel'nye
pribory i ustanovki; katalog-spravochnik. Moskva, Gos.nauchno-
tekhn.izd-vo mashinostroitel'noi lit-ry, 1955. 147 p.

(MLRA 9:1)

1. Russia (1923- U.S.S.R) Ministerstvo mashinostroyeniya i pri-
borostroyeniya.

(Electric furnaces)

VORONOVA, N.T., aspirantka

Clean and green fallows in a forest-steppe zone. Zemledelia 27
no.5:30-31 My '65. (MIRA 18:6)

1. Omskiy sel'skokhozyaystvennyy inatitut imeni Kirova.